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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/692,267 | 10/23/2003 | Youbao Peng | 03640'LH | 1589 |

1933 7590 03/10/2005

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EXAMINER

BRASE, SANDRA L

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2852

DATE MAILED: 03/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

SA

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|------------------------------|--------------------------------------|------------------------------------|--|
| Office Action Summary | Application No. 10/692,267 | Applicant(s) PENG ET AL. | |
| | Examiner Sandra L. Brase | Art Unit 2852 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9-38 is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☒ Claim(s) 8 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>5/24/04 & 2/12/04</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Specification

1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

3. Claims 1-6 are rejected under 35 U.S.C. 102(e) as being anticipated by Tamaoki (US 6,684,037).
4. Tamaoki (...037) discloses a fixing device of an image forming apparatus for thermally fixing a toner image formed on a transfer material, the fixing device comprising: a heating roller (2) having a heating device (4) and a temperature detector (5) spaced away from the heating roller, comprising a surface temperature detecting sensor for detecting a temperature of a surface of the heating roller, a compensation temperature sensor (10) for detecting an ambient temperature of the surface temperature detecting sensor, and a casing (6) having an opening portion (7) representing a first position and a portion enclosed by the casing representing a

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second position (figures 2 and 3), wherein the surface temperature detecting sensor is placed at the first position at which heat radiation of the heating roller is directly incident through the opening and the compensation temperature sensor is placed at the second position (figure 3), and wherein the opening portion is disposed so as not to enter a region between a vertical plane containing a central axis of the heating roller and a tangential plane to a circumferential surface of the heating roller parallel to the vertical plane (figure 2). The second position is a position at which the heat radiation of the heating roller is not directly incident (figure 3). Each angle made by each straight line drawn from a central position of each of the two sensors perpendicularly to the central axis of the heating roller, which represents a shortest distance between the central position and the central axis, and a plane containing a sensor surface of the corresponding one of the two sensors is about 90 degrees (figures 2 and 3). The casing for accommodating the two sensors of the temperature detecting device and a mounting member to be attached to the casing, is made of a material having a good thermal conductivity (col. 6, lines 1-7). The two sensors are fitted so as to be covered by the casing excluding the opening portion (figures 2 and 3). A calculating device for calculating the surface temperature of the heating roller on the basis of outputs of the two sensors; and a controller for controlling a temperature of the fixing device according to the calculated surface temperature (col. 5, line 7 – col. 6, line 62).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tamaoki (US 6,684,037) in view of Chung (US 6,389,247).

8. Tamaoki (...037) discloses an image forming apparatus comprising: a fixing roller (2) having a heater (4) therein for fixing a toner image formed on the basis of image information to a recording material; a temperature detector (5) spaced apart from the fixing roller for detecting a temperature of the fixing roller and outputting a detected value of the temperature; and a temperature controller for controlling the temperature of the fixing roller by making the heater to operate so as to make the fixing roller come to be at a preset temperature, on the basis of a preset reference temperature and the detected value of the temperature (col. 5, line 37 – col. 6, line 62). However, Tamaoki (...037) does not disclose controlling the temperature of the fixing roller to have a temperature value obtained by the addition of a preset correction value to a set temperature value. Chung (...247) discloses a temperature controller that controls the temperature of a fixing roller, with a reference temperature during a rotation of the fixing roller made to have a temperature value obtained by the addition of a preset correction value to a set

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temperature value of the fixing roller (abstract; col. 4, line 66 – col. 5, line 67; and figures 2, 4 and 5). It would have been obvious to one of ordinary skill in the art at the time of the invention to have a controller to control the temperature of the fixing roller to have a temperature value obtained by the addition of a preset correction value to a set temperature value, as disclosed by Chung (...247), so as to have the fixing roller obtain an optimal temperature corresponding to environmental conditions.

Allowable Subject Matter

9. Claim 8 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
10. Claims 9-38 are allowed.

Prior Art

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Headrick (US 4,672,177), Leising et al. (US 4,822,977), Noguchi et al. (US 5,768,654) and Kikuchi et al. (US 6,724,999) disclose a controller that controls a temperature of a fixing device.

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Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sandra L. Brase whose telephone number is 571-272-2131. The examiner can normally be reached on Monday-Thursday and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Arthur T. Grimley, can be reached on 571-272-2136. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Sandra L. Brase
Primary Examiner
Art Unit 2852

March 4, 2005